

CLAIMS

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3 1. A surgical dissector, comprising:

- 4 a) an elongate shaft;
5 b) a handle connected to shaft;
6 c) an articulation joint on the shaft;
7 d) an arcuate and elongate segment distal the articulation joint and having
8 a blunt distal end;
9 e) an actuator operable to pivot the segment; and
10 f) a light source emitting visible energy from the distal end of the
11 segment.
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13 2. The surgical dissector of claim 1, further comprising a hole positioned near
14 the distal end of the arcuate segment.
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16 3. The surgical dissector of claim 1, wherein the arcuate segment comprises an
17 arc portion.
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19 4. The surgical dissector of claim 3, wherein the arcuate segment further
20 comprises a linear portion distal the arc portion.
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22 5. The surgical dissector of claim 3, wherein the arcuate segment further
23 comprises a linear portion proximal the arc portion.
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25 6. The surgical dissector of claim 1, wherein the arcuate segment is between
26 about 2 inches and 2.5 inches in length.
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28 7. The surgical dissector of claim 1, wherein the shaft comprises a straight
29 portion proximal the articulation joint.
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31 8. The surgical dissector of claim 7, wherein the arcuate segment can pivot
32 between a first position where the distal end of the segment is substantially aligned
33 with axis of the straight portion, and a second position where the distal end of the
34 segment is at an angle relative the axis of the straight portion.

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2 9. The surgical dissector of claim 1, further comprising an actuation rod
3 connected at one end to the segment and connected at the other end to the actuator.
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5 10. The surgical dissector of claim 9, wherein the actuator comprises a knob on
6 the handle.
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8 11. The surgical dissector of claim 9, wherein the actuation rod is positioned in
9 the shaft.
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11 12. The surgical dissector of claim 1, wherein the visible energy is a diffuse and
12 unfocused light.
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14 13. The surgical dissector of claim 12, wherein the luminous intensity of the LED
15 is greater than about 300 lux and less than about 1500 lux.
16

17 14. The surgical dissector of claim 1, wherein the light source is an LED.
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19 15. A method for separating tubular structures from connective tissue with the
20 surgical dissector of claim 1, comprising the steps of:

- 21 a) positioning the blunt distal end of the segment adjacent a tubular
22 structure;
23 b) advancing the blunt end around the tubular structures to separate the
24 tubular structures from the connective tissue; and
25 c) simultaneously pivoting the arcuate segment.
26

27 16. The method of claim 15, wherein the tubular structure is a blood vessel.
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29 17. The method of claim 16, wherein the blood vessel is a pulmonary vein and the
30 connective tissue is the pericardium.
31

32 18. The method of claim 17, wherein steps are part of a procedure for treating
33 atrial fibrillation.
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1 19. The method of claim 15, further comprising the step of visually locating the
2 distal end of the arcuate segment by observing the visible energy passing through
3 tissue.

4
5 20. The method of claim 15, further comprising the step of differentiating tissue by
6 observing the visible energy passing through tissue.

7
8 21. A surgical dissector, comprising:

- 9 a) an articulated elongate shaft, the shaft comprising a joint, a rigid
10 straight segment proximal the joint, and a rigid arcuate segment distal
11 the joint;
12 b) an actuator operable to control the angular position of the arcuate
13 segment relative the straight segment;
14 c) a blunt tip on the distal end of the arcuate segment; and
15 d) a light source emitting a diffuse light from the blunt tip.

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17 22. The surgical dissector of claim 21, wherein the arcuate segment comprises an
18 arc portion and a linear portion proximal the arc portion.

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20 23. A surgical dissector, comprising an articulated elongate shaft having a smooth
21 arcuate segment with a plurality of angular positions, said arcuate segment
22 comprising an arc portion, a linear portion proximal the arc portion connected to a
23 joint, and a blunt tip at the distal end of the arcuate segment emitting a diffuse light.

24
25 24. A surgical dissector of claim 23, further comprising a functional component
26 means.